

**PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

**Toyota Industrial Equipment Manufacturing, Inc.
5555 Inwood Drive
Columbus, Indiana 47202**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 005-7545-00040	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary industrial truck manufacturing source.

Responsible Official:	R.J. Reynolds
Source Address:	5555 Inwood Drive, Columbus, Indiana 47202
Mailing Address:	5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487
SIC Code:	3537
County Location:	Bartholomew
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with air-assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 12 trucks per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with air-assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 12 trucks per hour.
- (c) One (1) counter-weight paint booth, identified as U003, constructed in 1993, equipped with air-assisted airless spray guns and a water curtain followed by a baffle demister as overspray control, exhausting to stacks S003a and S003b, capacity: 12 units per hour.
- (d) One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 12 trucks per hour.
- (e) One (1) D-500 paint booth, identified as U005, constructed in 1996, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 3 trucks per hour.

- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a baghouse (C010) and exiting into the building, capacity: 132,000 pounds of steel shot per hour.
- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a baghouse (C009) and exiting into the building, capacity: 60,000 pounds of shot per hour.
- (h) One (1) steel shot blast unit, with a maximum blast rate of 115,500 pounds per hour, controlled by a dust collector, designated as NEWSB, and exhausts inside the building.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
 - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
 - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
 - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
 - (4) Two (2) powder coating booths, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters

in series and the filters exhaust to the atmosphere.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management

Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision; and
 - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based

on State Implementation Plan (SIP) provisions).

- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
- (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM,, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of

the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]
Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at

least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Toyota Industrial Equipment Manufacturing, Inc.
Columbus, Indiana
Permit Reviewer:MES

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Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.11 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015

Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not

met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;

- (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.

- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with air-assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 7 trucks per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with air-assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 7 trucks per hour.
- (c) One (1) counter-weight paint booth, identified as U003, constructed in 1993, equipped with air-assisted airless spray guns and a water curtain followed by a baffle demister as overspray control, exhausting to stacks S003a and S003b, capacity: 7 trucks per hour.
- (d) One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 7 trucks per hour.
- (e) One (1) D-500 paint booth, identified as U005, constructed in 1996, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 1.5 trucks per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied to the fork lift trucks and all metal parts and surfaces shall be limited to 3.5 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calendar day, for forced warm air dried coatings.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

These facilities shall use no more than 245 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive months, based on a twelve (12) month rolling total. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to PC (03) 1733, issued on March 3, 1989, the primer coat paint booth, top coat paint booth, and touch-up paint booth are subject to the requirements of 326 IAC 6-3-2(c). Pursuant to CP 005-2724-00057, issued on May 26, 1993, the counter-weight paint booth is subject to the requirements of 326 IAC 6-3-2(c). Pursuant to CP 005-5827-00040, issued on August 19, 1996, the D-500 paint booth is subject to the requirements of 326 IAC 6-3-2(c). The particulate matter (PM) emissions from the aforementioned facilities will be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC and PM limits specified in Conditions D.1.1, D.1.2 and D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 VOC Emissions

Compliance with Condition D.1.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) months.

D.1.8 Particulate Matter (PM)

- (a) The horizontal water curtain followed by a demister shall be in operation at all times when the corresponding paint booth (primer coat paint booth or top coat paint booth) is in operation.

- (b) The water curtain followed by a baffle demister shall be in operation at all times the counter-weight paint booth is in operation.
- (c) The dry filters must be in operation at all times when the corresponding paint booth (touch-up paint booth or D-500 paint booth) is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and water curtains. To monitor the performance of the dry filters and water curtains, weekly observations shall be made of the overspray from the touch-up paint booth, D-500 paint booth, primer coat paint booth, top coat paint booth, and counter-weight paint booth stacks (S001a, S001b, S002a, S002b, S003a, S003b, S004 and S005a) while the booth exhausting to that stack is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks (S001a, S001b, S002a, S002b, S003a, S003b, S004 and S005a) and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily or monthly, as indicated below, and shall be complete and sufficient to establish compliance with the VOC emission limits and VOC usage limits established in Conditions D.1.1 and D.1.2.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day, only when a coating with a VOC content greater than 3.5 pounds per gallon is used that day;
 - (4) The cleanup solvent usage for each day;
 - (5) The total VOC usage for each month; and

- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.8 and D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a baghouse (C010) and exiting into the building, capacity: 132,000 pounds of steel shot per hour.
- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a baghouse (C009) and exiting into the building, capacity: 60,000 pounds of shot per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(c) (Process Operations), the allowable PM emission rate from the one (1) large parts shot blast cabinet shall not exceed 47.2 pounds per hour when operating at a process weight rate of 132,000 pounds per hour and the one (1) small parts shot blast cabinet shall not exceed 40.0 pounds per hour when operating at a process weight rate of 60,000 pounds per hour.

The pounds per hour limitation was calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$55.0P^{0.11} - 40 \quad \text{where} \quad E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.4 Particulate Matter (PM)

- (a) The baghouse (C009) shall be in operation at all times when the one (1) large parts shot blast cabinet is in operation.

- (b) The baghouse (C010) shall be in operation at all times when the one (1) small parts shot blast cabinet is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse stacks exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (C009 and C010) used in conjunction with the shot blasting processes, at least once weekly when the shot blasting is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the shot blasting operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.8 Broken Bag or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps

according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the baghouse stacks exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

Insignificant Activities

Facility Description [326 IAC 2-7-5(15)]

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
 - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
 - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
 - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
 - (4) Two (2) powder coating booths, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to PC (03) 1733, issued on March 3, 1989, the one (1) maintenance parts washer using mineral spirits with a capacity of sixteen (16) gallons is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations). Pursuant to this rule, the owner or operator of the one (1) parts washer shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the two (2) 0.75 MMBtu per hour heat input boilers shall be limited to 0.6 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

D.3.3 Particulate Matter (PM) [326 IAC 6-3]

- (a) The particulate matter (PM) from the one (1) counter-weight sanding booth, identified as I003, one (1) powder coat line, identified as I011, and ninety-nine (99) welding stations shall each not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour.
- (b) The particulate matter (PM) from the insignificant activities of brazing, cutting, soldering, remaining welding, grinding and machining shall be limited to the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

- (c) Pursuant to Exempt Construction and Operation Status, CP 005-10221-00040, the powder

coating booths and the washer/treatment process shall comply with 326 IAC 6-3-2(c) using the following equation:

$$E = 4.10P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour,}$$

P = process weight in tons per hour, if
P is equal to or less than 60,000 lbs/hr (30 tons/hr).

Compliance Determination Requirement

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Conditions D.3.2 and D.3.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.5 Particulate Matter (PM)

- (a) The dry filter shall be in operation at all times the counter weight sanding booth is in operation.
- (b) The primary and secondary filters shall be in operation at all times the powder coat lines are in operation.
- (c) Control devices corresponding to the insignificant activities of brazing, cutting, soldering, remaining welding, grinding and machining shall be in operation at all times when the associated equipment is in operation.

SECTION D.4

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (h) One (1) steel shot blast unit, with a maximum blast rate of 115, 500 pounds per hour, controlled by a dust collector, designated as NEWSB, and exhausts inside the building.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP005-10284-00040 and 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the shot blast unit shall not exceed 45.9 pounds per hour when operating at a process weight rate of 115,500 pounds per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirement

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.4.4 Particulate Matter (PM)

Pursuant to CP005-10284-00040, the dust collector for PM control shall be in operation at all times when the shot blast unit is in operation.

D.4.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shot blast unit at the point of exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.6 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all the dust collector. Defective cartridges and collectors shall be replaced. A record shall be kept of the results of the inspection and the number of dust collectors and cartridges replaced.

D.4.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector used in conjunction with the shot blast unit, at least once weekly when the shot blast unit is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.4.8 Failure Detection

In the event that a dust collector's failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions)
- (b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping Requirements [326 IAC 2-1-3]

D 4 9 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the mechanical blasting booth at the point of exhaust.
- (b) To document compliance with Condition D.4.7, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.4.6 and D.4.8, the Permittee shall maintain records of the results of the inspections, parts replaced and corrective actions taken if necessary.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, Indiana 47202
Mailing Address: 5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487
Part 70 Permit No.: T 005-7545-00040

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, Indiana 47202
Mailing Address: 5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487
Part 70 Permit No.: T 005-7545-00040

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
9	1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9	2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:

Date/Time Emergency/Deviation was corrected:

Was the facility being properly operated at the time of the emergency/deviation? Y N
Describe:

Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NO_x, CO, Pb, other:

Estimated amount of pollutant(s) emitted during emergency/deviation:

Describe the steps taken to mitigate the problem:

Describe the corrective actions/response steps taken:

Describe the measures taken to minimize emissions:

If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, Indiana 47202
Mailing Address: 5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487
Part 70 Permit No.: T 005-7545-00040

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, Indiana 47202
Mailing Address: 5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487
Part 70 Permit No.: T 005-7545-00040
Facility: One (1) touch-up paint booth, one (1) D-500 paint booth, one (1) primer coat paint booth, one (1) top coat paint booth, and one (1) counter-weight paint booth
Parameter: VOC Usage
Limit: 245 tons per twelve (12) consecutive months

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by:

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Address: 5555 Inwood Drive, Columbus, Indiana 47202
Mailing Address: 5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487
Part 70 Permit No.: T 005-7545-00040

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of Each Deviation

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Background and Description

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Location: 5555 Inwood Drive, Columbus, Indiana 47202
County: Bartholomew
SIC Code: 3537
Operation Permit No.: T 005-7545-00040
Permit Reviewer: CarrieAnn Ortolani, MES

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Toyota Industrial Equipment Manufacturing, Inc. relating to the operation of an industrial truck manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with air-assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 12 trucks per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with air-assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 12 trucks per hour.
- (c) One (1) counter-weight paint booth, identified as U003, constructed in 1993, equipped with air-assisted airless spray guns and a water curtain followed by a baffle demister as overspray control, exhausting to stacks S003a and S003b, capacity: 12 units per hour.
- (d) One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 12 trucks per hour.
- (e) One (1) D-500 paint booth, identified as U005, constructed in 1996, equipped with air-assisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 3 trucks per hour.
- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a baghouse (C010) and exiting into the building, capacity: 42 pounds of steel shot per hour.

Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

The source also consists of the following unpermitted facilities/units:

- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a baghouse (C009) and exiting into the building, capacity: 10.5 pounds of shot per hour.

New Emission Units and Pollution Control Equipment Requiring ENSR

There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) VOC and HAP storage containers storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (e) Equipment used exclusively for filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (i) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kilopascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF); or

- (2) having a vapor pressure equal to or less than 0.7 kilopascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (k) Closed loop heating and cooling systems.
- (l) Infrared cure equipment.
- (m) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.
- (n) Any operation using aqueous solutions containing less than one percent (1%) by weight of VOCs excluding HAPs.
- (o) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (p) Heat exchanger cleaning and repair.
- (q) Paved and unpaved roads and parking lots with public access.
- (r) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (s) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (t) Purge double block and bleed valves.
- (u) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
 - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
 - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
 - (3) One (1) iron phosphate spray washer.
 - (4) Ninety-nine (99) metal inert gas (MIG) welding stations.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following: list permits, registrations, modifications, exemptions, etc.

- (a) PC (03) 1733, issued on March 3, 1989;
- (b) OP 03-11-93-0158, issued on January 22, 1990;
- (c) OP 03-11-93-0159, issued on January 22, 1990;
- (d) CP 005-2724-00040, issued on May 26, 1993;
- (e) CP 005-4237-00040 (exempt status), issued on January 23, 1995; and
- (f) CP 005-5827-00040, issued on August 19, 1996.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) CP 005-4237-00040, exempted construction and operation status, issued on January 23, 1995

No condition number:

Pursuant to 326 IAC 6-3-2, the particulate matter emissions shall be limited to 0.29 pounds per hour from the powder booths.

Reason not incorporated: All insignificant activities with process weight rates less than 100 pounds per hour will be limited to particulate matter (PM) emissions of 0.551 pounds per hour.

- (b) CP 005-5827-00040, issued on August 19, 1996

Operation Condition 4:

That the amount of volatile organic compounds (VOC's), including clean up solvents delivered to the applicators, shall be limited to 39.9 tons/year. This production limitation is equivalent to VOC emissions of 3.325 tons per month. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IA 2-2 and 40 CFR 52.21, will not apply.

Reason not incorporated: The source has accepted a source-wide limit of 249 tons of VOC per year to be a minor source pursuant to 326 IAC 2-2, PSD.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the baghouses (C009 and C010) be considered as an integral part of the shot blasting operations:

- (a) The baghouses exhaust inside the building.

- (b) The shot collected by the baghouses is recycled into the process.

IDEM, OAM has evaluated the justifications and determined that the baghouses will not be considered as an integral part of the shot blasting process. Therefore, the permitting level will be determined using the potential emissions before the baghouses (C009 and C010).

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment requires a registration and is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 12, 1996. Additional information was received on April 27, 1998, June 11, 1998, July 23, 1998, and August 12, 1998.

A notice of completeness letter was mailed to the source on January 13, 1997.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (5 pages).

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	1,276
PM ₁₀	1,276
SO ₂	5.0

VOC	2,209
CO	5.0
NO _x	5.0

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Xylene	greater than 10
Ethyl benzene	greater than 10
Formaldehyde	less than 10
MEK	greater than 10
Ethylene glycol	less than 10
Glycol Ethers	greater than 10
Manganese	less than 10
Chromium	less than 10
Nickel	less than 10
TOTAL	greater than 25

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of VOC and PM₁₀ are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in 326 IAC 1-2-55) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in 326 IAC 1-2-55) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.
- (d) This source is a major source as defined by 40 CFR 70.2 (Part 70-Definitions) and industrial truck manufacturing is not listed as an exempt source category under 40 CFR 70.3 (Part 70-Applicability). Therefore, pursuant to 40 CFR 70.3 (Part 70-Applicability), this source is

subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	1.33
PM ₁₀	1.33
SO ₂	0.019
VOC	66.4
CO	0.612
NO _x	3.15
HAP (Ethyl benzene)	2.60
HAP (Ethylene Glycol)	0.083
HAP (Formaldehyde)	0.007
HAP (Methanol)	0.015
HAP (MEK)	13.3
HAP (Toluene)	0.486
HAP (Xylene)	12.6
HAP (Chromium)	0.003
HAP (Glycol Ethers)	7.46
HAP (Manganese)	0.011
HAP (Nickel)	0.003

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Five (5) paint booths	6.39	6.39	0.00	245	0.00	0.00	62.3
Two (2) shot blast units	0.920	0.791	0.00	0.00	0.00	0.00	0.036
Insignificant Activities	20.0	20.0	5.00	4.20	5.00	5.00	5.00
Total Emissions	27.3	27.2	5.00	249	5.00	5.00	67.4

County Attainment Status

The source is located in Bartholomew County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Bartholomew County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12), 40 CFR Part 60 applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63, applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has not submitted a Preventive Maintenance Plan (PMP). A PMP will be required for the one (1) touch-up paint booth, one (1) D-500 paint booth, one (1) primer coat paint booth, one (1) top coat paint booth, and one (1) counter-weight paint booth. This PMP will be verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 1-7 (Stack Height Provisions)

This source is not subject to the requirements of 326 IAC 1-7, Stack Height Provisions, because the small parts shot blast cabinet stack, not previously permitted, has a potential to emit less than 25 tons per year of PM. All remaining stacks were previously permitted.

326 IAC 2-2 (Prevention of Significant Deterioration)

The source has agreed to limit VOC usage by the one (1) touch-up paint booth, one (1) D-500 paint booth, one (1) primer coat paint booth, one (1) top coat paint booth, and one (1) counter-weight paint booth to 245 tons per twelve (12) consecutive months. Therefore, the potential to emit VOC from the entire source, including insignificant activities, is less than 250 tons per year, and the requirements of 326 IAC 2-2, PSD, are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC and PM₁₀. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-1-3.4 (New Source Toxics Control)

All facilities at this major source of hazardous air pollutants (HAPs) were constructed prior to July 27, 1997. Therefore, the requirements of 326 IAC 2-1-3.4, New Source Toxics Control, do not apply.

326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating)

The allowable PM emissions from the two (2) insignificant natural gas-fired boilers, constructed after 1983, are based upon the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

$$Pt = 1.09 / 1.50^{0.26} = 0.98 \text{ lbs PM / MMBtu}$$

This number is greater than the allowable emissions stated in 326 IAC 6-2-4(a), therefore, the allowable emissions for the boilers shall be limited to 0.6 lbs PM per million British thermal units.

The potential PM emissions from the boilers limited to 0.6 lb PM per million British thermal units are:

$$(1.50 \text{ MMBtu/hr}) \times (8.76 \text{ hr} \times \text{MMcf}) / (\text{MMBtu} \times \text{yr}) = 13.14 \text{ MMcf/yr}$$

$$13.14 \text{ MMcf/yr} \times 12 \text{ lbs/MMcf} = 158 \text{ lbs/yr}$$

$$158 \text{ lbs/yr} / (1.50 \text{ MMBtu/hr} \times 8760 \text{ hrs/yr}) = 0.012 \text{ lbs PM / MMBtu}$$

Thus, the boilers will comply with the emission limitations of 326 IAC 6-2-4.

326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to PC (03) 1733, issued on March 3, 1989, the primer coat paint booth, top coat paint booth, and touch-up paint booth are subject to the requirements of this rule. Pursuant to CP 005-2724-00057, issued on May 26, 1993, the counter-weight paint booth is subject to the requirements of this rule. Pursuant to CP 005-5827-00040, issued on August 19, 1996, the D-500 paint booth is subject to the requirements of this rule. The particulate matter (PM) emissions from the aforementioned facilities will be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (1) The horizontal water curtains followed by demisters shall be in operation at all times when the corresponding paint booth (primer coat paint booth or top coat paint booth) is in operation, in order to comply with this limit.
 - (2) The water curtain followed by a baffle demister shall be in operation at all times the counter-weight paint booth is in operation, in order to comply with this limit.
 - (3) The dry filters must be in operation at all times when the corresponding paint booth (touch-up paint booth or D-500 paint booth) is in operation, in order to comply with this limit.
- (b) The particulate matter (PM) from the one (1) large parts shot blast cabinet and one (1) small parts shot blast cabinet shall each not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour. Since the potential to emit PM after control from the large shot blast unit is 0.168 pounds per hour and the potential to emit PM after control from the small shot blast unit is 0.042 pounds per hour, the one (1) large parts shot blast cabinet and one (1) small parts shot blast cabinet will comply with this rule. Compliance will be demonstrated by operating baghouse (C009) at all times when the large parts shot blast cabinet is in operation and baghouse (C010) at all times when the small parts shot blast cabinet is in operation.
- (c) The particulate matter (PM) from the one (1) counter-weight sanding booth, identified as I003, one (1) powder coat line, identified as I011, and ninety-nine (99) welding stations shall each not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour.
- (1) The dry filter shall be in operation at all times the counter weight sanding booth is in operation, in order to comply with this limit.
 - (2) The primary and secondary filter shall be in operation at all times the powder coat line is in operation, in order to comply with this limit.
 - (3) Since the process weight rate through the total of all 99 welding stations is 359 pounds per hour, the process weight rate through any one (1) welding station will not exceed 100 pounds per hour. Therefore, the particulate matter (PM) from each of the 99 welding stations shall not exceed 0.551 pounds per hour. Since the potential to emit PM from the total of the 99 welding stations is 3.49 pounds per hour, each welding station will comply with this rule.
- (d) The particulate matter (PM) from the insignificant activities of brazing, cutting, soldering, remaining welding, grinding and machining shall be limited to the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

P = process weight rate in tons per hour

Control devices shall be in operation at all times when the associated equipment is in operation, in order to comply with this limit.

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to PC (03) 1733, issued on March 3, 1989, the operation of the one (1) insignificant maintenance parts washer, using mineral spirits, with a capacity of sixteen (16) gallons, shall comply with the provisions of 326 IAC 8-3. The owner or operator of the cold cleaning facility shall:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operating requirements;
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

- (a) Pursuant to PC (03) 1733, issued on March 3, 1989, the volatile organic compound (VOC) content of coating delivered to the applicators at the primer coat paint booth, top coat paint booth, and touch-up paint booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.
- (b) Pursuant to CP 005-2724-00057, issued on May 26, 1993, the volatile organic compound (VOC) content of coating delivered to the applicators at the counter-weight paint booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.
- (c) Pursuant to CP 005-5827-00040, issued on August 19, 1996, the volatile organic compound (VOC) content of coating delivered to the applicators at the D-500 paint booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the one (1) touch-up paint booth, one (1) D-500 paint booth, one (1) primer coat paint booth, one (1) top coat paint booth, and

one (1) counter-weight paint booth are in compliance with this requirement.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The one (1) touch-up paint booth, one (1) D-500 paint booth, one (1) primer coat paint booth, one (1) top coat paint booth, and one (1) counter-weight paint booth have applicable compliance monitoring conditions as specified below:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and water curtains. To monitor the performance of the dry filters and water curtains, daily observations shall be made of the overspray from the touch-up paint booth, D-500 paint booth, primer coat paint booth, top coat paint booth, and counter-weight paint booth stacks (S001a, S001b, S002a, S002b, S003a, S003b, S004 and S005a) while the booth exhausting to that stack is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Weekly inspections shall be performed of the coating emissions from the stacks (S001a, S001b, S002a, S002b, S003a, S003b, S004 and S005a) and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters and water curtains for the one (1) touch-up paint booth, one (1) D-500 paint booth, one (1) primer coat paint booth, one (1) top coat paint booth, and one (1) counter-weight paint booth must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations (page 2, 3 and 4 of 5).

Conclusion

The operation of this industrial truck manufacturing source shall be subject to the conditions of the attached proposed Part 70 Permit No. T 005-7545-00040.

Appendix A: Federal Potential Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive
Part 70: T 005-7545
Plt ID: 005-00040
Reviewer: CarrieAnn Orotolani
Date: December 12, 1996

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Flash-off (fraction)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential tons per year	lb VOC /gal solids	Transfer Efficiency
U001																	
AXD0140 - Primer	13.57	25.56%	0.0%	25.6%	0.0%	50.59%	0.71000	12.000	1.000	3.47	3.47	29.55	709.24	129.44	94.24	6.86	75%
PPA0016-Gray Top Coat w/CTC0075	9.89	35.25%	0.0%	35.3%	0.0%	51.63%	0.68000	12.000	1.000	3.49	3.49	28.45	682.74	124.60	57.22	6.75	75%
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	36.59%	0.0%	36.6%	0.0%	51.71%	0.18000	12.000	1.000	3.47	3.47	7.48	179.63	32.78	14.20	6.70	75%
PPA0017-Black Top Coat w/CTC 0075	9.46	36.00%	0.0%	36.0%	0.0%	64.00%	0.62000	12.000	1.000	3.41	3.41	25.34	608.10	110.98	49.32	5.32	75%
CTC0075	9.17	16.03%	0.0%	16.0%	0.0%	79.65%	0.37000	12.000	1.000	1.47	1.47	6.53	156.64	28.59	37.44	1.85	75%
U002																	
AXD0140 - Primer	13.57	25.56%	0.0%	25.6%	0.0%	50.59%	0.71000	12.000	1.000	3.47	3.47	29.55	709.24	129.44	94.24	6.86	75%
PPA0016-Gray Top Coat w/CTC0075	9.89	35.25%	0.0%	35.3%	0.0%	51.63%	0.68000	12.000	1.000	3.49	3.49	28.45	682.74	124.60	57.22	6.75	75%
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	36.59%	0.0%	36.6%	0.0%	51.71%	0.18000	12.000	1.000	3.47	3.47	7.48	179.63	32.78	14.20	6.70	75%
PPA0017-Black Top Coat w/CTC 0075	9.46	36.00%	0.0%	36.0%	0.0%	64.00%	0.62000	12.000	1.000	3.41	3.41	25.34	608.10	110.98	49.32	5.32	75%
CTC0075	9.17	16.03%	0.0%	16.0%	0.0%	79.65%	0.37000	12.000	1.000	1.47	1.47	6.53	156.64	28.59	37.44	1.85	75%
U003																	
AXD0140 - Primer	13.57	25.56%	0.0%	25.6%	0.0%	50.59%	0.71000	12.000	1.000	3.47	3.47	29.55	709.24	129.44	94.24	6.86	75%
PPA0016-Gray Top Coat w/CTC0075	9.89	35.25%	0.0%	35.3%	0.0%	51.63%	0.68000	12.000	1.000	3.49	3.49	28.45	682.74	124.60	57.22	6.75	75%
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	36.59%	0.0%	36.6%	0.0%	51.71%	0.18000	12.000	1.000	3.47	3.47	7.48	179.63	32.78	14.20	6.70	75%
PPA0017-Black Top Coat w/CTC 0075	9.46	36.00%	0.0%	36.0%	0.0%	64.00%	0.62000	12.000	1.000	3.41	3.41	25.34	608.10	110.98	49.32	5.32	75%
CTC0075	9.17	16.03%	0.0%	16.0%	0.0%	79.65%	0.37000	12.000	1.000	1.47	1.47	6.53	156.64	28.59	37.44	1.85	75%
U004																	
AXD0140 - Primer	13.57	25.56%	0.0%	25.6%	0.0%	50.59%	0.71000	15.000	1.000	3.47	3.47	36.94	886.55	161.79	117.80	6.86	75%
PPA0016-Gray Top Coat w/CTC0075	9.89	35.25%	0.0%	35.3%	0.0%	51.63%	0.68000	15.000	1.000	3.49	3.49	35.56	853.43	155.75	71.52	6.75	75%
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	36.59%	0.0%	36.6%	0.0%	51.71%	0.19000	15.000	1.000	3.47	3.47	9.36	224.54	40.98	17.75	6.70	75%
PPA0017-Black Top Coat w/CTC 0075	9.46	36.00%	0.0%	36.0%	0.0%	64.00%	0.62000	15.000	1.000	3.41	3.41	31.67	760.13	138.72	61.65	5.32	75%
CTC0075	9.17	16.03%	0.0%	16.0%	0.0%	79.65%	0.37000	15.000	1.000	1.47	1.47	8.16	195.80	35.73	46.80	1.85	75%
Toyota Hi-Gloss Black Acrylic Urethane	9.50	36.00%	0.0%	36.0%	0.0%	unknown	0.06400	15.000	1.000	3.42	3.42	3.28	78.80	14.38	6.39	unknown	75%
Toyota Hi-Gloss Black Enamel 1-pack	10.59	32.00%	0.0%	32.0%	0.0%	unknown	0.06000	15.000	1.000	3.39	3.39	3.05	73.20	13.36	7.10	unknown	75%
U9001-71 Blue	8.09	56.00%	0.0%	56.0%	0.0%	unknown	0.01800	15.000	1.000	4.53	4.53	1.22	29.36	5.36	1.05	unknown	75%
U9000-71 Orange	8.51	46.00%	0.0%	46.0%	0.0%	unknown	0.02500	15.000	1.000	3.91	3.91	1.47	35.23	6.43	1.89	unknown	75%
U9003-71 Gray	8.76	51.00%	0.0%	51.0%	0.0%	unknown	0.02500	15.000	1.000	4.47	4.47	1.68	40.21	7.34	1.76	unknown	75%
U9002-71 Black	8.34	56.00%	0.0%	56.0%	0.0%	unknown	0.01800	15.000	1.000	4.67	4.67	1.26	30.26	5.52	1.08	unknown	75%
U9004-71 N. Orange	8.00	41.00%	0.0%	41.0%	0.0%	unknown	0.03700	15.000	1.000	3.28	3.28	1.82	43.69	7.97	2.87	unknown	75%
U005																	
AXD0140 - Primer	13.57	25.56%	0.0%	25.6%	0.0%	50.59%	0.62000	3.000	1.000	3.47	3.47	6.45	154.83	28.26	20.57	6.86	75%
PPA0016-Gray Top Coat w/CTC0075	9.89	35.25%	0.0%	35.3%	0.0%	51.63%	0.53000	3.000	1.000	3.49	3.49	5.54	133.03	24.28	11.15	6.75	75%
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	36.59%	0.0%	36.6%	0.0%	51.71%	0.17000	3.000	1.000	3.47	3.47	1.77	42.41	7.74	3.35	6.70	75%
PPA0017-Black Top Coat w/CTC 0075	9.46	36.00%	0.0%	36.0%	0.0%	64.00%	0.62000	3.000	1.000	3.41	3.41	6.33	152.03	27.74	12.33	5.32	75%
CTC0075	9.17	16.03%	0.0%	16.0%	0.0%	79.65%	0.18000	3.000	1.000	1.47	1.47	0.79	19.05	3.48	4.55	1.85	75%
Cleanup																	
SURROUND	8.67	91.50%	86.0%	5.5%	0.0%	8.00%	0.20000	15.000	1.000	0.48	0.48	1.43	34.33	6.27	2.42	5.96	75%
TEM429	7.00	100.00%	0.0%	100.0%	0.0%	0.00%	0.35000	15.000	1.000	7.00	7.00	36.73	881.62	160.90	0.00	n/a	75%
PRESTOLINE 8348	7.00	100.00%	0.0%	100.0%	0.0%	0.00%	0.16000	15.000	1.000	7.00	7.00	16.80	403.20	73.58	0.00	n/a	75%

State Potential Emissions

Add worst case coating to all solvents

503	12081	2205	1149

Control Technology Emissions (Combustion)																
Type	Number	Capacity MMBtu/hr	Gas usage MMCF/yr	Emission Factors						PM tons/yr	PM10 tons/yr	Emissions		NOx tons/yr	VOC tons/yr	CO tons/yr
				PM lb/MMCF	PM10 lb/MMCF	SO2 lb/MMCF	NOx lb/MMCF	VOC lb/MMCF	CO lb/MMCF			SO2 tons/yr	NOx tons/yr			
Catalytic			0.0	3.0	3.0	0.6	100.0	5.3	35.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermal			0.0	3.0	3.0	0.6	140.0	2.8	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total			0.0							0.0	0.0	0.0	0.0	0.0	0.0	0.0
										Control Efficiency		Controlled	Controlled	Controlled	Controlled	
										VOC	PM	VOC pounds	VOC pounds	VOC	Particulate	
									U001, U002, U004	0	0.95	per hour	per day	tons/yr	tons/yr	
									U003	0	0.995					
									U005	0	0.92					
Controlled Emissions due to Surface Coating Operations and Controls																
												503	12081	2205	57.5	

Controlled Emissions due to Surface Coating Operations and Controls

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * Flash-off
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day) * Flash-off
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs) * Flash-off
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Flash-off
Total = Worst Coating + Sum of all solvents used

HAP Emission Calculations

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
 Address City IN Zip: 5555 Inwood Drive
 Part 70: T 005-7545
 Plt ID: 005-00040
 County: Bartholomew
 Reviewer: CarrieAnn Ortolani
 Date: December 12, 1996

Material	Density (lb/gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Flash-off (fraction)	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Weight % MEK	Weight % Ethylene Glycol	Weight % Glycol Ethers	Xylene Emissions (tons/yr)	Ethylbenzene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	MEK Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Glycol Ethers Emissions (tons/yr)	Total Emissions (tons/yr)
U001																	
AXD0140 - Primer	13.57	0.71000	12.000	1.00	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.06	0.00	0.00	0.00	0.00	0.00	5.06
PPA0016-Gray Top Coat w/CTC0075	9.89	0.68000	12.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	9.40%	3.89	0.00	0.00	0.00	0.00	33.23	37.1
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	0.18000	12.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	8.50%	0.99	0.00	0.00	0.00	0.00	7.62	8.60
PPA0017-Black Top Coat w/CTC 0075	9.46	0.62000	12.000	1.00	1.80%	0.00%	0.00%	0.00%	0.00%	8.40%	5.55	0.00	0.00	0.00	0.00	25.90	31.4
CTC0075	9.17	0.37000	12.000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
U002																	
AXD0140 - Primer	13.57	0.71000	12.000	1.00	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.06	0.00	0.00	0.00	0.00	0.00	5.06
PPA0016-Gray Top Coat w/CTC0075	9.89	0.68000	12.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	9.40%	3.89	0.00	0.00	0.00	0.00	33.23	37.1
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	0.18000	12.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	8.50%	0.99	0.00	0.00	0.00	0.00	7.62	8.60
PPA0017-Black Top Coat w/CTC 0075	9.46	0.62000	12.000	1.00	1.80%	0.00%	0.00%	0.00%	0.00%	8.40%	5.55	0.00	0.00	0.00	0.00	25.90	31.4
CTC0075	9.17	0.37000	12.000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
U003																	
AXD0140 - Primer	13.57	0.71000	12.000	1.00	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.06	0.00	0.00	0.00	0.00	0.00	5.06
PPA0016-Gray Top Coat w/CTC0075	9.89	0.68000	12.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	9.40%	3.89	0.00	0.00	0.00	0.00	33.23	37.1
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	0.18000	12.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	8.50%	0.99	0.00	0.00	0.00	0.00	7.62	8.60
PPA0017-Black Top Coat w/CTC 0075	9.46	0.62000	12.000	1.00	1.80%	0.00%	0.00%	0.00%	0.00%	8.40%	5.55	0.00	0.00	0.00	0.00	25.90	31.4
CTC0075	9.17	0.37000	12.000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
U004																	
AXD0140 - Primer	13.57	0.71000	15.000	1.00	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.33	0.00	0.00	0.00	0.00	0.00	6.33
PPA0016-Gray Top Coat w/CTC0075	9.89	0.68000	15.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	9.40%	4.86	0.00	0.00	0.00	0.00	41.53	46.4
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	0.18000	15.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	8.50%	1.23	0.00	0.00	0.00	0.00	9.52	10.8
PPA0017-Black Top Coat w/CTC 0075	9.46	0.62000	15.000	1.00	1.80%	0.00%	0.00%	0.00%	0.00%	8.40%	6.94	0.00	0.00	0.00	0.00	32.37	39.3
CTC0075	9.17	0.37000	15.000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toyota Hi-Gloss Black Acrylic Urethane	9.50	0.06400	15.000	1.00	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00	0.00	0.00	2.00	0.00	0.00	2.00
Toyota Hi-Gloss Black Enamel 1-pack	10.59	0.06000	15.000	1.00	15.00%	5.00%	0.00%	0.00%	0.00%	0.00%	6.26	2.09	0.00	0.00	0.00	0.00	8.35
U9001-71 Blue	8.09	0.01800	15.000	1.00	35.00%	5.00%	0.00%	0.00%	0.00%	0.00%	3.35	0.48	0.00	0.00	0.00	0.00	3.83
U9000-71 Orange	8.51	0.02500	15.000	1.00	30.00%	5.00%	0.00%	0.00%	0.00%	0.00%	4.19	0.70	0.00	0.00	0.00	0.00	4.89
U9003-71 Gray	8.76	0.02500	15.000	1.00	35.00%	5.00%	0.00%	0.00%	0.00%	0.00%	5.04	0.72	0.00	0.00	0.00	0.00	5.76
U9002-71 Black	8.34	0.01800	15.000	1.00	30.00%	5.00%	0.00%	0.00%	0.00%	0.00%	2.96	0.49	0.00	0.00	0.00	0.00	3.45
U9004-71 N. Orange	8.00	0.03700	15.000	1.00	15.00%	10.00%	0.00%	0.00%	0.00%	0.00%	2.92	1.94	0.00	0.00	0.00	0.00	4.86
U005																	
AXD0140 - Primer	13.57	0.62000	3.000	1.00	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.11	0.00	0.00	0.00	0.00	0.00	1.11
PPA0016-Gray Top Coat w/CTC0075	9.89	0.53000	3.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	9.40%	0.76	0.00	0.00	0.00	0.00	6.47	7.23
PPE0002-Coral Orange Top Coat w/CTC 0075	9.47	0.17000	3.000	1.00	1.10%	0.00%	0.00%	0.00%	0.00%	8.50%	0.23	0.00	0.00	0.00	0.00	1.80	2.03
PPA0017-Black Top Coat w/CTC 0075	9.46	0.62000	3.000	1.00	1.80%	0.00%	0.00%	0.00%	0.00%	8.40%	1.39	0.00	0.00	0.00	0.00	6.47	7.86
CTC0075	9.17	0.18000	3.000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleanup																	
SURROUND	8.67	0.20000	15.000	1.00	0.00%	0.00%	0.40%	0.00%	5.00%	0.00%	0.00	0.00	0.46	0.00	5.70	0.00	6.15
TEM429	7.00	0.35000	15.000	1.00	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	80.4	0.00	0.00	0.00	0.00	0.00	80.4
PRESTOLINE 8348	7.00	0.16000	15.000	1.00	40.00%	10.00%	0.00%	50.00%	0.00%	0.00%	29.4	7.36	0.00	36.8	0.00	0.00	73.6

Total State Potential Emissions

TOTALS:	(tons/yr):	204	13.8	0.456	38.8	5.70	298	561
	(lb/hr):	46.6	3.15	0.104	8.86	1.30	68.1	128
	(g/sec):	5.87	0.396	0.013	1.12	0.164	8.58	16.1

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emission Calculations
Abrasive Blasting**

Page 3 of 5 TSD App A

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive
Part 70: T 005-7545
Plt ID: 005-00040
Reviewer: CarrieAnn Ortolani
Date: December 12, 1996

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Potential Shot Usage (lbs/hr)	Percentage through small parts shot blast cabinet (%)	Percentage through large parts shot blast cabinet (%)	Potential Shot Usage Small (lbs/hr)	Potential Shot Usage Large (lbs/hr)
52.5	20%	80%	10.5	42.0

Calculations

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =
 Potential Shot Usage (lbs/hr)
 w = fraction of time of wet blasting =
 EF = emission factor (lb PM-10/ lb PM) From Table 1 =
 EF = emission factor (lb Manganese/ lb PM) =
 EF = emission factor (lb Chromium/ lb PM) =
 EF = emission factor (lb Nickel/ lb PM) =
 Control Efficiency (%) =

0.004
52.5
0%
0.86
0.02
0.01
0.01
99.0%

Small Parts Shot Blast Cabinet

		PM	PM-10	Manganese	Chromium	Nickel
Uncontrolled Emissions :	(lbs/hr)	4.20	3.61	0.084	0.042	0.042
	(tons/yr)	18.4	15.8	0.368	0.184	0.184
Controlled Emissions :	(lbs/hr)	0.042	0.036	0.001	0.0004	0.0004
	(tons/yr)	0.184	0.158	0.004	0.002	0.002

Large Parts Shot Blast Cabinet

		PM	PM-10	Manganese	Chromium	Nickel
Uncontrolled Emissions :	(lbs/hr)	16.8	14.4	0.336	0.168	0.168
	(tons/yr)	73.6	63.3	1.47	0.736	0.736
Controlled Emissions :	(lbs/hr)	0.168	0.144	0.003	0.002	0.002
	(tons/yr)	0.736	0.633	0.015	0.007	0.007

Total for Two (2) Shot Blast Cabinets

		PM	PM-10	Manganese	Chromium	Nickel
Uncontrolled Emissions :	(lbs/hr)	21.0	18.1	0.420	0.210	0.210
	(tons/yr)	92.0	79.1	1.84	0.920	0.920
Controlled Emissions :	(lbs/hr)	0.210	0.181	0.004	0.002	0.002
	(tons/yr)	0.920	0.791	0.018	0.009	0.009

METHODOLOGY

Emission Factors from Stappa Alapco, Section 3 "Abrasive Blasting"
 HAP emissions factors assume same HAP composition in steel shot as in steel
 Controlled emissions = shot usage * emission factor
 Uncontrolled emissions = shot usage * emission factor/ (1-control efficiency)

Appendix A: Emissions Calculations Insignificant Welding Operations

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive
Part 70: T 005-7545
Plt ID: 005-00040
Reviewer: CarrieAnn Ortolani
Date: December 12, 1996

Amount of weld wire used 1997 (lbs)	Trucks Produced 1997 (units)	Weld Wire Usage Factor (lbs/unit)	Maximum Truck Production (units/hr)	Maximum Truck Production (units/yr)	Potential Weld wire Usage (lbs/hr)
616680	14601	42.2	15.00	131400	634

Type of Welding	Number of Units	Electrode Type	Maximum Total Electrode Consumption (lbs/hr)	Emission Factors (lb pollutant/lb electrode consumed)		Potential Emissions (tons/year)	
				PM	Manganese	PM	Manganese
Metal Inert Gas (MIG)	99.0	Carbon Steel	634	0.0055	0.0005	15.26	1.39
Stick Welding	0.0	Carbon Steel	0.00	0.0370	0.0030	0.00	0.00
Oxyacetylene	0.0	Carbon Steel	0.00	0.0055	0.0005	0.00	0.00
Total Potential Emissions (tons/yr):						15.3	1.39

METHODOLOGY

Emissions (tons/yr) = Maximum Total Electrode Consumption per Unit * Emission Factor (lb pollutant/lb electrode consumed) * 8760 (hrs/yr) * (1 ton/2000 lbs)
 Emission Factors are from the SARA 313 Reporting Guide.

Appendix A: Emissions Calculations
From Insignificant Activities Resulting in VOC Emissions

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive
Part 70: T 005-7545
Plt ID: 005-00040
Reviewer: CarrieAnn Ortolani
Date: December 12, 1996

One (1) maintenance parts cleaner

Unit Name	Capacity (gallons)	Solvent Replacement Period (weeks)	Solvent Density (lbs/gal)	Solvent Usage (lbs/hr)	Solvent Usage (tons/yr)
Unit 1	16	12.0	6.61	0.052	0.230
Total:					0.230

Gasoline Dispensing

Material	Usage 1997 (gallons/yr)	Truck Production 1997	Potential Annual Truck Production	Potential Gasoline Usage (gallons/yr)	Displacement Loss Emission Factor (lb VOC/gallon)	Spill Loss Emission Factor (lb VOC/gallon)	Displacement Loss (tons VOC/yr)	Spill Loss (tons VOC/yr)	Total VOC Emissions (tons/yr)
Gasoline	8500	14601	74460	43347	0.011	0.001	0.238	0.015	0.254

Storage Tanks

Material	Potential Breathing Losses (lbs/yr)	Potential Working Losses (lbs/yr)	Total Potential Tank Emissions (lbs/yr)	Total Potential Tank Emissions (ton/yr)
Gasoline	307	535	842	0.421
Various	15.0	34.0	49.0	0.025
Total:				0.446

Natural Gas Combustion

Material	Plant Wide Heat Input Capacity (MMBtu/hr)	Potential Usage (MMcf/yr)	VOC Emission Factor (lb/MMcf)	Potential VOC Emissions (tons/yr)
Natural Gas	29.33	257	5.30	0.681

Miscellaneous

Material	Material Density (lbs/gal)	Weight % VOC (%)	Actual Material Usage Rate (gallons/yr)	Truck Production 1997	Potential Annual Truck Production	Potential Material Usage Rate (gallons/yr)	Potential VOC Emissions (tons/yr)
Anti-splatter	11.51	0.1%	275	14601	74460	1402	0.008

Material	Material Density (lbs/gal)	Weight % VOC (%)	Maximum Material Usage 1996 & 1997 (gallons/yr)	Operating Schedule (weeks)	Potential Operating Schedule (weeks)	Potential Material Usage Rate (gallons/yr)	Potential VOC Emissions (tons/yr)
Benjamin Moore Floor Paint	9.40	59.3%	892	50	52	928	2.59

Total Potential VOC Emissions: 4.20 tons/yr

METHODOLOGY

Parts Washer

Emissions = Capacity/ solvent replacement period * solvent density

Gasoline Dispensing

Emissions = gasoline usage (scaled to maximum production) * (displacement loss emission factor + spill loss emission factor)

Storage Tanks

Provided by the applicant. Based on capacity, throughput, product stored, and type of tank.

Natural Gas Combustion

Emissions = Total source natural gas usage * VOC emission factor / 2,000 lbs/ton

Miscellaneous

Emissions = material density * % volatile * material usage (scaled to maximum production)

Emissions = material density * % volatile * material usage (scaled to maximum operating schedule (floor paint usage not dependent upon production))

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Toyota Industrial Equipment Manufacturing, Inc.
Source Location: 5555 Inwood Drive, Columbus, Indiana 47202
County: Bartholomew
SIC Code: 3537
Operation Permit No.: T 005-7545-00040
Permit Reviewer: CarrieAnn Ortolani, MES

On October 16, 1998, the Office of Air Management (OAM) had a notice published in the Republic, Columbus, Indiana, stating that Toyota Industrial Equipment Manufacturing, Inc. had applied for a Part 70 Operating Permit to operate an industrial truck manufacturing source with dry filters, water curtains and baghouses as controls. The notice also stated that OAM proposed to issue a Part 70 Operating Permit for this operation and provided information on how the public could review the proposed Part 70 Operating Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit should be issued as proposed.

On November 13, 1998, Dixon Churchill, Environmental, Health and Safety Supervisor, Toyota Industrial Equipment Mfg., Inc., submitted comments on the proposed Part 70 Operating Permit. Where the permit language is changed, deleted language appears as ~~strikeouts~~, new language is **bolded**. The comments are as follows:

Comment 1:

The summary information on page 5 section A.2(f) is incorrectly stated. The large shot blast cabinet U009 consumes 42 pounds of steel shot per hour. The actual throughput or process rate is 132,000 pounds per hour.

Response 1:

Section A.2, item (f), has been revised as follows:

- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a baghouse (C010) and exiting into the building, capacity: ~~42~~ **132,000** pounds of steel shot per hour.

Comment 2:

The summary information on page 6 section A.2(g) also needs correction. The consumption of U010 is 10.5 pounds per hour while the process rate is 60,000 pounds per hour.

Response 2:

Section A.2, item (g), has been revised as follows:

- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a baghouse (C009) and exiting into the building, capacity: ~~40.5~~ **60,000** pounds of shot per hour.

Comment 3:

The facility description of these two items was not updated on page 34 to match these consumption numbers on page 5 & 6. I would suggest they be changed to the process rates mentioned above.

Response 3:

These items are changed as stated in Responses 1 and 2. As a result of this correction, the allowable PM emissions from the shot blast units are greater than 10 pounds per hour. Therefore, a Preventive Maintenance Plan and Compliance Monitoring is required for these units. The following conditions have been added to Section D.2 and the remaining conditions have been renumbered accordingly:

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse stacks exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (C009 and C010) used in conjunction with the shot blasting processes, at least once weekly when the shot blasting is in operation when venting to the atmosphere. Unless operated under

conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the shot blasting operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. ~~Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

D.2.8 Broken Bag or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the baghouse stacks exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and

- (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event.
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (b) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

The following Conditions have been added to Section C and the remainder of Section C has been renumbered accordingly:

C.11 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Comment 4:

The process rate formula used in section D.2.1 for particulate matter should be updated to reflect both units at 60,000+ pounds per hour.

Response 4:

Condition D.2.1 has been revised as shown below. The two (2) shot blast units will comply with 326 IAC 6-3-2 as shown in the attached TSD Addendum Appendix A.

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(c) (Process Operations), the allowable PM emission rate from the one (1) large parts shot blast cabinet **shall not exceed 47.2 pounds per hour when operating at a process weight rate of 132,000 pounds per hour** and the one (1) small parts shot blast cabinet shall not exceed ~~0.554~~ **40.0** pounds per hour when operating at a process weight rate of ~~less than 100~~ **60,000** pounds per hour.

The pounds per hour limitation was calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$55.0P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Comment 5:

Section D.2.2 states that stack tests may be required, however neither of the units have stacks. This is not possible and should be omitted from the permit.

Response 5:

Condition D.2.2 (now D.2.3) does not require stack tests at the present time. If stack tests are required they will be performed at the point of exhaust from the baghouses.

Comment 6:

Section C.13 states that a RMP be filed for hazardous materials processing or storage above certain quantities. T.I.E.M. does not store or process any of these materials in threshold quantities and would ask that this section be removed from the permit.

Response 6:

The Risk Management Plan provision does not state that the Permittee has more than the threshold quantity of a regulated substance. Condition C.13 (now C.15), Risk Management Plan, begins, "If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement..." Although the condition is not applicable at the present time, the provision may be applicable if the Permittee meets the threshold at some time in

the future. The condition remains in the permit.

Comment 7:

Section D.1.10(a)(i) states solvent usage records shall differentiate between those added to coatings and those used as clean-up solvents. T.I.E.M. does not add solvents to any of its surface coatings and therefore it should not be necessary to differentiate any product.

Response 7:

In the case that T.I.E.M. does add solvents to any coating in the future, the usage records shall differentiate between those added to coatings and those used as clean-up solvent. Since no solvents are added to coatings, the solvent usage for solvents added to coatings will be zero (0).

Comment 8:

Section D.1.10(a) states that daily VOC content and usage records be kept for each source. T.I.E.M. has each batch of material certified by the supplier (Valspar) that as applied, product is # 3.5 pounds VOCs/gallon before it is shipped. Certification statements are mailed to T.I.E.M. and kept on file to show compliance coatings are being used. T.I.E.M. dispenses product by pail and drum that will not likely be fully used in a given day. Daily transfer of materials would be maintained at each source and monthly VOC usage's would be calculated shortly after month end, based on those material transfers. VOC content based on daily transfers may not show compliance because all the product will not be used on that day. T.I.E.M. requests daily records of VOC usage not be required.

Response 8:

Since the supplier certification is for the coatings as applied, these certifications will be sufficient to establish compliance with 326 IAC 8-2-9 and the daily volume weighted average is not necessary to show that the VOC content is less than 3.5 pounds per gallon. Condition D.1.10(a)(3) is only necessary when a coating with a VOC content greater than 3.5 pounds per gallon is applied. Therefore, Condition D.1.10(a) has been revised as follows:

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily or monthly, as indicated below, and shall be complete and sufficient to establish compliance with the VOC emission limits and VOC usage limits established in Conditions D.1.1 and D.1.2.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day, **only when a coating with a VOC content greater than 3.5 pounds per gallon is used that**

day;

- (4) The cleanup solvent usage for each day;
- (5) The total VOC usage for each month; and
- (6) The weight of VOCs emitted for each compliance period.

Comment 9:

T.I.E.M. has just received exemption status on the construction of a two (2) booth powdercoat system to be installed in early 1999. The permit reference number is CP995-10221-00040. Please include this in the Title V permit.

Response 9:

Section A.3 item (e)(4) has been added to the permit. The facility has also been added to the facility description in Section D.3. The description is as follows:

- (4) Two (2) powder coating booths, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.**

Condition D.3.3(c) has been added to the permit as follows:

- (c) Pursuant to Exempt Construction and Operation Status, CP 005-10221-00040, the powder coating booths and the washer/treatment process shall comply with 326 IAC 6-3-2(c) using the following equation:**

$$E = 4.10P^{0.67}$$

E = rate of emission in pounds per hour,
P = process weight in tons per hour, if
P is equal to or less than 60,000 lbs/hr (30 tons/hr).

Condition D.3.5(b) has been revised as follows:

- (b) The primary and secondary filters shall be in operation at all times the powder coat lines ~~is~~ are in operation.**

Toyota Industrial Equipment Manufacturing, Inc. also received a Construction Permit with Enhanced New Source Review, CP005-10284-00040, issued on February 1, 1999, for a new shot blast unit. The unit has been added to Section A.2 as item (h).

- (h) One (1) steel shot blast unit, with a maximum blast rate of 115,500 pounds per hour, controlled by a dust collector, designated as NEWSB, and exhausts inside the building.**

Toyota Industrial Equipment Manufacturing, Inc.
Columbus, Indiana
Permit Reviewer:MES

Page 9 of 12
T 005-7545-00040

Section D.4 has been added to the permit. Section D.4 is as follows:

SECTION D.4

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (h) One (1) steel shot blast unit, with a maximum blast rate of 115, 500 pounds per hour, controlled by a dust collector, designated as NEWSB, and exhausts inside the building.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP005-10284-00040 and 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the shot blast unit shall not exceed 45.9 pounds per hour when operating at a process weight rate of 115,500 pounds per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirement

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.4.4 Particulate Matter (PM)

Pursuant to CP005-10284-00040, the dust collector for PM control shall be in operation at all times when the shot blast unit is in operation.

D.4.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shot blast unit at the point of exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.6 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all the dust collector. Defective cartridges and collectors shall be replaced. A record shall be kept of the results of the inspection and the number of dust collectors and cartridges replaced.

D.4.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector used in conjunction with the shot blast unit, at least once weekly when the shot blast unit is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.4.8 Failure Detection

In the event that a dust collector's failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions)
- (b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping Requirements [326 IAC 2-1-3]

D.4.9 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the mechanical blasting booth at the point of exhaust.
- (b) To document compliance with Condition D.4.7, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.4.6 and D.4.8, the Permittee shall maintain records of the results of the inspections, parts replaced and corrective actions taken if necessary.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Upon further review, the OAM has decided to make the following changes to the Part 70 Operating Permit:

Change 1:

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (~~Visible Emissions~~ **Opacity** Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), ~~visible emissions~~ opacity shall meet the following, unless otherwise stated in this permit:

- (a) ~~Visible emissions~~ **Opacity** shall not exceed an average of forty percent (40%) ~~opacity~~ in ~~twenty four (24) consecutive readings~~, any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) ~~Visible emissions~~ **Opacity** shall not exceed sixty percent (60%) ~~opacity~~ for more than a cumulative total of fifteen (15) minutes (sixty (60) readings **as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor**) in a six (6) hour period.

Change 2:

Condition D.1.9 has been revised as follows:

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters and water curtains. To monitor the performance of the dry filters and water curtains, ~~daily~~ **weekly** observations shall be made of the overspray from the touch-up paint booth, D-500 paint booth, primer coat paint booth, top coat paint booth, and counter-weight paint booth stacks (S001a, S001b, S002a, S002b, S003a, S003b, S004 and S005a) while the booth exhausting to that stack is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) ~~Weekly~~ **Monthly** inspections shall be performed of the coating emissions from the stacks (S001a, S001b, S002a, S002b, S003a, S003b, S004 and S005a) and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

As a result of this change, Condition D.1.10(b) has been revised as follows:

- (b) To document compliance with Condition D.1.8 and D.1.9, the Permittee shall maintain a log

of ~~daily~~ **weekly** overspray observations, daily and ~~weekly~~ **monthly** inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

Change 3:

The IDEM now believes that Condition B.28, Credible Evidence, is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit. Therefore, Condition B.28 has been removed from the permit.

~~B.28 Credible Evidence [326 IAC 2-7-5(3)][62 Federal Register 8313][326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

Change 4:

In order to clarify the VOC limitation, Condition D.1.2 has been revised as follows:

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

These facilities shall use no more than 245 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive months, **based on a twelve (12) month rolling total**. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

**Appendix A: Emission Calculations
Abrasive Blasting**

Page 1 of 1 TSD Addendum App A

Company Name: Toyota Industrial Equipment Manufacturing, Inc.
Address City IN Zip: 5555 Inwood Drive
Part 70: T 005-7545
Plt ID: 005-00040
Reviewer: CarrieAnn Ortolani
Date: November 17, 1998

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Potential Shot Throughput Small (lbs/hr)	Potential Shot Throughput Large (lbs/hr)
60000	132000

Calculations

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =
 Potential Shot Throughput (lbs/hr) =
 w = fraction of time of wet blasting =
 EF = emission factor (lb PM-10/ lb PM) From Table 1 =
 EF = emission factor (lb Manganese/ lb PM) =
 EF = emission factor (lb Chromium/ lb PM) =
 EF = emission factor (lb Nickel/ lb PM) =
 Control Efficiency (%) =

0.004
192000
0 %
0.86
0.02
0.01
0.01
99.0%

Total for two (2) Shot Blast Cabinets

		PM	PM-10	Manganese	Chromium	Nickel
Uncontrolled Emissions :	(lbs/hr)	768	660	15.4	7.68	7.68
	(tons/yr)	3364	2893	67.3	33.6	33.6
Controlled Emissions :	(lbs/hr)	7.68	6.60	0.154	0.077	0.077
	(tons/yr)	33.6	28.9	0.673	0.336	0.336

Large Parts Shot Blast Cabinet

		PM	PM-10	Manganese	Chromium	Nickel
Uncontrolled Emissions :	(lbs/hr)	528	454	10.6	5.28	5.28
	(tons/yr)	2313	1989	46.3	23.1	23.1
Controlled Emissions :	(lbs/hr)	5.28	4.54	0.106	0.053	0.053
	(tons/yr)	23.1	19.9	0.463	0.231	0.231

Small Parts Shot Blast Cabinet

		PM	PM-10	Manganese	Chromium	Nickel
Uncontrolled Emissions :	(lbs/hr)	240	206	4.80	2.40	2.40
	(tons/yr)	1051	904	21.0	10.5	10.5
Controlled Emissions :	(lbs/hr)	2.40	2.06	0.048	0.024	0.024
	(tons/yr)	10.5	9.04	0.210	0.105	0.105

METHODOLOGY

Emission Factors from Stappa Alapco, Section 3 "Abrasive Blasting"
 HAP emissions factors assume same HAP composition in steel shot as in steel
 Controlled emissions = shot usage * emission factor
 Uncontrolled emissions = shot usage * emission factor/ (1-control efficiency)

Allowable Rate of Emissions

Small Shot Blast Unit

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)
60000	30.0	40.0

Large Shot Blast Unit

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)
132000	66.0	47.2

Methodology

Allowable Emissions = (55.0(Process Weight Rate)^{0.11})-40, when process weight rate is greater than 60,000 lbs/hr
 Allowable Emissions = 4.10(Process Weight Rate)^{0.67}, when process weight rate is less than or equal to 60,000 lbs/hr